

# Blood Lead Screening Guidelines for Minnesota

## A Physician Should Test a Child at Any Age:

- If the **parent expresses a concern** about, or asks for their child to be tested for blood lead poisoning
- If the child **moved from a major metropolitan area or another country** within the last twelve months

## Routine Screen:

Child health-care providers should **use a blood lead test\*** to screen children at one and two years of age, and children up to six years of age who have not previously been screened if:

**The child lives within the city limits of Minneapolis or St. Paul;**

**or**

**The child receives services from Minnesota Care (MnCare), the Supplemental Food Program for Women, Infants, and Children (WIC), or Medical Assistance (MA) - which includes the Prepaid Medical Assistance Program (PMAP);**

**or**

**The child does not fit the criteria above, and the answer to any of the following questions is “Yes” or “Don’t Know”:**

- During the past six months has the child lived in or regularly visited a home, childcare, or other building built before 1950?
- During the past six months has the child lived in or regularly visited a home, childcare, or other building built before 1978 with recent or ongoing repair, remodeling or damage (such as water damage or chipped paint)?
- Has the child or his/her sibling, playmate, or housemate had an elevated blood lead level?

## Periodic Evaluation:

In order to monitor a change in the child’s status, administer the following questions annually to all children **three to six years of age** whose previous test results were less than 10 ug/dL. Screen the child with a blood lead test\* if the answer to any of the following questions is “Yes” or “Don’t Know.”

**Since the child’s last blood lead test:**

- Does the child have a playmate, housemate, or sibling who has recently been diagnosed with an elevated blood lead?
- Has the child moved to or started regularly visiting a home, childcare, or other building built before 1950?
- Has there been any repair, remodeling, or damage (such as water damage or chipped paint) to a home childcare, or other building built before 1978 that the child lives in or regularly visits?

\* A blood lead test for lead poisoning is a laboratory analysis for lead in the blood of a child or adult. An elevated blood lead test is a result greater than or equal to 10 micrograms lead per deciliter of blood. Laboratories performing blood lead analysis are required to report all results to the Minnesota Department of Health.



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## Follow-up Care

If result of capillary screening test (ug/dL) is:	Perform diagnostic test on venous blood within:
10-19	3 months
20-44	1 month - 1 week
45-59	48 hours
60-69	24 hours
>70	<b>Immediately</b> (as an emergency lab test)

### Follow-up testing for children with elevated diagnostic BLLs

- Children with diagnostic BLLs of 10-14 ug/dL should have at least one follow-up test within 3 months.
- Children with diagnostic BLLs of 15-19 ug/dL should have a follow-up test within 2 months.
- If the result of the follow-up testing is  $\geq 20$  ug/dL, or if the child has had two or more venous BLLs of 15-19 ug/dL at least 3 months apart, the child should receive clinical management.
- Children with diagnostic BLLs  $\geq 20$  ug/dL should receive clinical management which includes follow-up testing.

### Clinical management includes

- Clinical evaluation for complications of lead poisoning.
- Family lead education and referrals.
- Chelation therapy, if appropriate.
- Follow-up testing at appropriate intervals.

### Provide appropriate chelation therapy

- A child with a BLL > 45 ug/dL should be treated promptly with appropriate chelating agents and be removed from sources of lead exposure.

### Environmental Management

- Contact the Minnesota Department of Health/Local Public Health Agency.

## Sources of Lead

THE MOST COMMON SOURCES OF LEAD ARE PAINT, DUST, SOIL, AND WATER. OTHER SOURCES INCLUDE:

### Traditional Remedies/Cosmetics

IN ASIAN, AFRICAN, & MIDDLE EASTERN COMMUNITIES:

(as a cosmetic, or a treatment for skin infections or umbilical stump)

-alkohl, kajal, kohl, or surma (black powder)

IN ASIAN COMMUNITIES:

(for intestinal disorders)

-bali goli (round flat black bean)

-ghasard/ghazard (brown powder)

-kandu (red powder)

IN HMONG COMMUNITIES:

(for fever or rash)

-pay-loo-ah (orange/red powder)

IN LATINO COMMUNITIES:

(for abdominal pain/empacho)

-azarcon (yellow/orange powder), also known as: alarcon, cora, coral, liga,

maria luisa, and rueda

-greta (yellow/orange powder)

IN SOUTH ASIAN (EAST INDIAN) COMMUNITIES:

(bindi dot)

-sindoor (red powder)

(dietary supplement)

-Ayurvedic herbal medicine products (HMPs)

### Occupations/Industries

-Ammunition/explosives maker

-Auto repair/auto body work

-Battery maker

-Building or repairing ships

-Cable/wire stripping, splicing or production

-Construction

-Ceramics worker (pottery, tiles)

-Firing range worker

-Leaded glass factory worker

-Industrial machinery/equipment

-Jewelry maker or repair

-Junkyard employee

-Lead miner

-Melting metal (smelting)

-Painter

-Paint/pigment manufacturing

-Plumbing

-Pouring molten metal (foundry work)

-Radiator repair

-Remodeling/repainting/renovating houses or buildings

-Removing paint (sandblasting, scraping, sanding, heat gun or torch)

-Salvaging metal or batteries

-Welding, burning, cutting or torching

-Steel metalwork

-Tearing down buildings/metal structures

### Hobbies/Miscellaneous

(may include above occupations)

-Antique/imported toys

-Chalk (particularly for snooker/billiards)

-Remodeling, repairing, renovating home

-Painting/stripping cars, boats, bicycles

-Soldering

-Melting lead for fishing sinkers or bullets

-Making stained glass

-Firing guns at a shooting range